UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,191	10/31/2001	Roland M. Hochmuth	10017760-1	5760

7590 05/16/2007

HEWLETT-PACKARD COMPANY
Intellectual Property Adiminstration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
NGUYEN, HAU H	
ART UNIT	**PAPER NUMBER**
2628	
MAIL DATE	**DELIVERY MODE**
05/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/004,191	HOCHMUTH ET AL.	
	Examiner	Art Unit	
	Hau H. Nguyen	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 March 2007*.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *37-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *37-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 6, 2007 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 37-39, 43-45, 50-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ee (U.S. Patent No. 6,466,203) in view of Tsuda et al. (U.S. Patent No. 6,044,445).

Referring to claim 37, Van Ee teaches a system for display an image comprising:

a display device (as shown in Fig. 1, col. 2, lines 51-54) *communicatively couplable to a network* (internet 116) *and adapted to display the image, the display device comprising*:

a display network interface (114) *operable to receive bitmap image data of the image from the network* (116, col. 2, lines 15-35, and col. 3, lines 57-62);

a display frame buffer (112) *operable to store the received graphics image data* (col. 2, lines 31-35); *and*

a display refresh unit operable to read the graphics image data from the display frame buffer and display the image (col. 3, line 55 to col. 4, line 5).

Although Van Ee does not explicitly teach the display refresh unit refresh the image *at a refresh rate*, Van Ee does teach the received graphics image from the network is streamed video, i.e. the display device as taught by Van Ee is capable of refreshing the image in order to display video frame by frame as is well known in the art. This is also taught by Tsuda et al. As shown in Fig. 1, Tsuda et al. teach a display device communicatively coupled to a network via a network interface 113, which received image from the network. The received image data is stored in a display frame buffer 119, and then read out to be displayed on the display 119 at an appropriate refresh rate (col. 1, lines 30-65).

Therefore, it would have been obvious to one skilled in the art to utilize the method of refreshing the image as taught by Tsuda et al. in combination with the method as taught by Van Ee in order to ensure the received image is properly displayed on the display device.

As per claims 38 and 39, Van Ee teaches the display network interface comprising a network interface port for receiving graphics image from the network (wireless modem 14).

As per claim 43, Van Ee teaches the display device adapted to display the image via an LCD 102 (Fig. 1).

As per claim 44, although Van Ee did not teach receiving the bitmap image data from a remote source device via a plurality of packets, Tsuda et al. teaches this feature as cited above (col. 1, lines 30-65). Thus, claim 44 would have been obvious.

Claims 45, 52, and 58, which are similar in scope to claim 37, are thus rejected under the same rationale.

Claim 50, which is similar in scope to claim 43, is thus rejected under the same rationale.

Claim 51, which is similar in scope to claim 44, is thus rejected under the same rationale.

As per claim 55, which is similar in scope to claim 37, further requires the network interface and the display refresh unit is integrated in a single-chip display controller. However, it would have been obvious to one skilled in the art to integrate the components of the network interface and the display refresh unit in a single chip display controller because by doing so, the size of the circuit board can be reduced and the circuit paths can also be shortened, thereby reducing the cost while enhancing performance.

Claim 61, which is similar in scope to claim 55, is thus rejected under the same rationale.

4. Claims 40-42, 46-49, 53-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ee (U.S. Patent No. 6,466,203) in view of Tsuda et al. (U.S.

Patent No. 6,044,445), and further in view of Robotham et al. (U.S. Patent No. 6,704,024).

Referring to claims 40-42, Van Ee and Tsuda et al. fail to disclose a decompression unit to decompress bitmap image data and store in the frame buffer. However, Robotham et al. teach a method to display of visual content on a client device using rasterized representations of visual content, wherein visual content is rendered on a server system, transformed into bitmaps compatible with the display attributes of a client device, and transmitted for display on the client device (col. 3, lines 5-10). As shown in Fig. 1, the client 24, which can be a PDA, or a wireless phone, comprising a network interface graphical image from the network, a memory 7 to store the fetched graphical image data, a display 5 to retrieve and display the image data (col. 8, lines 30-52). Robotham et al. further teach the display device also includes a decompression unit to decompress graphics image data (col. 9, lines 40-45). It is inherent that the bitmap image data is decompressed before being stored in the frame buffer because frame buffer is used to store data ready for display. Therefore, it would have been obvious to one skilled in the art to utilize the decompression unit as taught by Robotham et al. in combination with the method as taught by Van Ee and Tsuda et al. in order to reduce the bandwidth during data transmission.

Claims 46-47, 49, 53-54, 56-57, and 59-60, which are similar in scope to claims 40-42, are thus rejected under the same rationale.

As per claim 48, Van Ee and Tsuda et al. fail to teach storing decompressed graphics image data and the graphics image data in different portions of the display

frame buffer. However, as cited above, Robotham et al. teach decompressing image data and storing decompressed image data. Robotham et al. further teach storing the received graphics image data into different portions of the display frame buffer (e.g. by dividing the received image into multiple tiles in which tile size is related to the size of a client viewport 16 so that the user to select or switch between tiles, pan across adjacent tiles, and/or to scroll across adjacent tiles (col. 29, lines 24-40)). Thus, claim 48 would have been obvious.

Response to Arguments

5. Applicant's arguments with respect to claims 37-54 have been considered but are not persuasive. In response to Applicant's arguments that reference Van Ee fails to teach the display device receives data from the network is bitmap image data, the examiner disagrees. In fact, the cited portion in the rejections above and throughout the disclosure of the Patent Van Ee, the handheld device receives data in the form of bitmap image. The examiner also noted that nowhere in the Specification of the instant Application that the display device receives bitmap image data directly, i.e. without being decoded or processed. Fig. 3 shows the graphics data is compressed before sending. Page 5 of the specification (lines 28-30), where the only disclosure of bitmap data information is available, states "*Rendering of an image typically comprises translating high-level instruction to bitmap images which are a matrix of pixels.*" Thus, the received image data should be in different formats (other than bitmap image data) before being translated into bitmap data. Further, if the received graphics data is stored

without being decoded as argued by Applicant, then claims 40-42 would conflict with the arguments.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau H. Nguyen whose telephone number is: 571-272-7787. The examiner can normally be reached on MON-FRI from 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on (571) 272-7794.

The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

H. Nguyen

5/10/2007

KEE M. TUNG
SUPERVISORY PATENT EXAMINER